

CTEH® Project #40442 West Fertilizer Plant Explosion Summary of Air Monitoring Results April 30, 2013 10:00

This data report discusses real-time air monitoring data collected between 4/29/2013 07:00 and 4/30/2013 07:00 in support of remediation operations conducted near the West Fertilizer Plant Explosion in West, TX.

Real-time air monitoring was conducted for volatile organic compounds (VOCs) and ammonia (NH₃), using remote-telemetering RAESystems[®] AreaRAEs and hand-held instruments such as the RAESystems[®] MultiRAE.

Tables 1 and 2 (below) display data summaries for hand-held and AreaRAE instruments, respectively. Site maps and charts are available as attachments.

Table 1: Hand-held Real-time Air Monitoring Summary
April 29, 2013 07:00 – April 30, 2013 07:00

Analyte	Instrument	Number of Readings	Number of Detections	Average of Detections	Range of Detections				
Community									
Ammonia	MultiRAE	1	0	NA	< 0.1 ppm				
Work Area									
Ammonia	MultiRAE	11	0	NA	< 1 ppm				
VOC	MultiRAE	1	0	NA	< 0.1 ppm				

¹Please note: The data displayed here has not undergone complete QA/QC analysis and is presented in a preliminary format. PPM = Parts Per Million



Table 2 Stationary AreaRAE Monitoring Stations Data Logged 4/29/2013 07:00 to 4/30/2013 07:00

Unit	Analyte	Count of Readings	Count of Detections	Average of Detections	Max Detection
AR13	NH3	5616	0	NA	< 1 ppm
	VOC	5616	0	NA	< 0.1 ppm
AR14	NH3	4321	0	NA	< 1 ppm
	VOC	4321	0	NA	< 0.1 ppm
AR16	NH3	3875	0	NA	< 1 ppm
	VOC	3875	0	NA	< 0.1 ppm
AR17	NH3	5432	0	NA	< 1 ppm
	VOC	5432	0	NA	< 0.1 ppm
AR18	NH3	5424	0	NA	< 1 ppm
	VOC	5424	0	NA	< 0.1 ppm

¹The data in this table may include electronic drift. Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift. Additionally, the data has not undergone complete QAQC as of this time.



Appendix



Air Monitoring Zone Classifications¹ April 30, 2013





AreaRAE Monitoring Station Locations 4/30/2013





Manually Logged Ammonia Real-Time Readings 4/29/2013 07:00 to 4/30/2013 07:00





Manually Logged VOC Real-Time Readings 4/29/2013 07:00 to 4/30/2013 07:00



